

## WHAT IS CLAIMED IS:

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1. A game and home entertainment device remote control system comprising:

a remote control having a touch pad, the touch pad generating a touch pad signal in response to a gesture on the touch pad;

a display screen having a display area; and

a controller in communication with the touch pad and the display screen, the controller operative to:

receive the touch pad signal,

determine whether the touch pad signal is for controlling a game or for controlling a home entertainment device,

if the touch pad signal is for controlling a game, perform a game activity in response to the touch pad signal and cause a result of the game activity to be displayed on the display screen, and

if the touch pad signal is for controlling a home entertainment device, enable a home entertainment device control function.

2. A game and home entertainment device remote control system as in claim 1 wherein the display screen is mapped to the touch pad so that the gesture on the touch pad is scaled correspondingly to an appropriate region of the display screen.

3. A game and home entertainment device remote control system as in claim 1 wherein the display screen displays a moveable object, the controller further operative to proportionately position the moveable object on the display screen corresponding to a location touched on the touch pad.

4. A game and home entertainment device remote control system as in claim 1 wherein the touch pad is logically divided into a plurality of regions, each region corresponding to one of a plurality of selectable items displayed on the display screen.

1 5. A game and home entertainment device remote control system  
2 as in claim 1 wherein the touch pad is divided into a plurality of regions, the  
3 controller further operative to interpret at least one gesture in one of the plurality  
4 of regions differently than the at least one gesture is interpreted in another of the  
5 plurality of regions.

1 6. A game and home entertainment device remote control system  
2 as in claim 1 wherein the controller is operative to interpret at least one gesture on  
3 the touch pad based on at least one parameter programmed by a user of the system.

1 7. A game and home entertainment device remote control system  
2 as in claim 1 wherein the controller is further operative to adapt the operation of the  
3 touch pad to at least one operator idiosyncrasy.

1 8. A game and home entertainment device remote control system  
2 as in claim 1 wherein the system offers a plurality of games, the controller further  
3 operative to vary the functioning of the touch pad to fit each of the plurality of  
4 games.

1 9. A game and home entertainment device remote control system  
2 as in claim 1 wherein the controller is further operative to vary the functioning of  
3 the touch pad to fit each of a plurality of scenarios in at least one game.

1 10. A game and home entertainment device remote control system  
2 as in claim 1 wherein at least one gesture associated with at least one game may be  
3 taught to the controller by a user of the system.

1 11. A game and home entertainment device remote control system  
2 as in claim 1 wherein the controller is further operative to associate a sequence of  
3 game control options in at least one game with a gesture on the touch pad.

1                   12.     A game and home entertainment device remote control system  
2 as in claim 1 wherein the controller is further operative to associate at least one  
3 gesture with a particular user of the system.

1                   13.     A game and home entertainment device remote control system  
2 as in claim 1 wherein the gesture is one of a plurality of gestures comprising at least  
3 one simple linear movement.

1                   14.     A game and home entertainment device remote control system  
2 as in claim 1 wherein the gesture is one of a plurality of gestures comprising at least  
3 one free floating input.

1                   15.     A game and home entertainment device remote control system  
2 as in claim 1 wherein the gesture is one of a plurality of gestures comprising at least  
3 one gesture that is pad-to-screen mapped.

1                   16.     A game and home entertainment device remote control system  
2 as in claim 1 wherein the gesture is one of a plurality of gestures comprising at least  
3 one pressure sensitive gesture.

1                   17.     A game and home entertainment device remote control system  
2 as in claim 1 wherein the gesture is one of a plurality of gestures comprising at least  
3 one rotational control gesture.

1                   18.     A game and home entertainment device remote control system  
2 as in claim 1 wherein the gesture is one of a plurality of gestures comprising at least  
3 one velocity control gesture.

1                   19.     A game and home entertainment device remote control system  
2 as in claim 1 wherein the gesture is one of a plurality of gestures comprising at least  
3 one acceleration control gesture.

1                   20.     A game and home entertainment device remote control system  
2 as in claim 1 wherein the gesture is one of a plurality of gestures comprising at least  
3 one alphanumeric character entry gesture.

1                   21.     A game and home entertainment device remote control system  
2 as in claim 1 wherein the gesture is one of a plurality of gestures comprising at least  
3 one complex gesture, the complex gesture having at least two elements from a set  
4 consisting of straight line movements, taps, holds and circular movements.

1                   22.     A game and home entertainment device remote control system  
2 as in claim 1 wherein the touch pad is physically divided into a plurality of regions.

1                   23.     A game and home entertainment device remote control system  
2 as in claim 1 wherein the controller determines whether the touch pad signal is for  
3 controlling a game or for controlling a home entertainment device based on a signal  
4 previously received from the remote control.

1                   24.     A game and home entertainment device remote control system  
2 as in claim 1 wherein at least a portion of the display area is mapped to the touch  
3 pad.

1                   25.     A game and home entertainment device remote control system  
2 as in claim 1 wherein the remote control comprises a trigger switch.

1                   26.     A remote control for controlling a home entertainment device  
2 and for playing on-screen games in conjunction with a display screen, the remote  
3 control comprising:

4                   a touch pad generating touch pad signals in response to user contact  
5 with the touch pad; and

6                   a controller in communication with the touch pad, the home  
7 entertainment device and the display screen, the controller mapping at least a portion  
8 of the display screen to a surface area of the touch pad, the controller moving an  
9 object on the display screen to a location on the display screen corresponding to a

10 touched location on the touch pad surface area for playing at least one on-screen  
11 game, the controller further recognizing gestures for controlling the home  
12 entertainment device.

1 27. A remote control for a home entertainment device comprising:  
2 a touch pad generating touch pad signals in response to user contact  
3 with the touch pad; and

4 a controller in communication with the touch pad, the home  
5 entertainment device and the display screen, the controller mapping at least a portion  
6 of the display screen to a surface area of the touch pad, the controller moving an  
7 object on the display screen to a location on the display screen corresponding to a  
8 touched location on the touch pad surface area for playing at least one on-screen  
9 game.

1 28. A remote control for controlling a home entertainment device  
2 and for playing on-screen games in conjunction with a display screen, the remote  
3 control comprising:

4 a touch pad generating touch pad signals in response to user contact  
5 with the touch pad; and

6 a controller in communication with the touch pad, the home  
7 entertainment device and the display screen, the controller recognizing gestures  
8 made on the touch pad for playing at least one game and displaying results of  
9 recognizing each gesture on the display screen, the controller further recognizing  
10 gestures made on the touch pad for controlling the home entertainment device.

1 29. A method of remotely controlling a home entertainment device  
2 comprising:

3 receiving at least one gesture on a touch pad, the touch pad remote  
4 from the home entertainment device;

5 determining whether the at least one received gesture was made for  
6 controlling the home entertainment device or for playing a game;

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7 if the at least one gesture was made for controlling the home  
8 entertainment device, generating at least one control signal for the home  
9 entertainment device based on the at least one received gesture; and

10 if the at least one gesture was made for playing a game, performing  
11 a game activity based on the at least one received gesture and displaying the results  
12 of the performed game activity on a display screen.

1 30. A method of remotely controlling a home entertainment device  
2 as in claim 29 wherein the touch pad is part of a remote control device.

1 31. A method of remotely controlling a home entertainment device  
2 as in claim 30 wherein the determination of whether the at least one received gesture  
3 was made for controlling the home entertainment device or for playing the game is  
4 based on at least one input previously received from the remote control.

1 32. A method of remotely controlling a home entertainment device  
2 as in claim 29 further comprising the mapping at least a portion of the display screen  
3 to the touch pad so that the at least one gesture received on the touch pad is scaled  
4 correspondingly to the at least a portion of the display screen.

1 33. A method of remotely controlling a home entertainment device  
2 as in claim 29 further comprising logically dividing the touch pad into a plurality of  
3 regions, each region corresponding to one of a plurality of selectable items displayed  
4 on the display screen.

1 34. A method of remotely controlling a home entertainment device  
2 as in claim 29 further comprising dividing the touch pad into a plurality of regions  
3 and interpreting at least one gesture in one of the plurality of regions differently than  
4 the at least one gesture is interpreted in another of the plurality of regions.

1 35. A method of remotely controlling a home entertainment device  
2 as in claim 29 further comprising interpreting at least one gesture on the touch pad  
3 based on at least one parameter programmed by a user of the system.

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1                   36.     A method of remotely controlling a home entertainment device  
2 as in claim 29 further comprising adapting the operation of the touch pad to at least  
3 one operator idiosyncrasy.

1                   37.     A method of remotely controlling a home entertainment device  
2 as in claim 29 further comprising varying the functioning of the touch pad to fit each  
3 of a plurality of games.

1                   38.     A method of remotely controlling a home entertainment device  
2 as in claim 29 further comprising learning at least one gesture associated with the  
3 game taught by a user of the touch pad.

1                   39.     A method of remotely controlling a home entertainment device  
2 as in claim 29 further comprising associating at least one gesture with a particular  
3 user of the system.

1                   40.     A method of remotely controlling a home entertainment device  
2 as in claim 29 further comprising recognizing at least one of a plurality of gestures  
3 on the touch pad as representing simple linear movement.

1                   41.     A method of remotely controlling a home entertainment device  
2 as in claim 29 further comprising recognizing at least one of a plurality of gestures  
3 on the touch pad as representing free floating input.

1                   42.     A method of remotely controlling a home entertainment device  
2 as in claim 29 further comprising recognizing at least one of a plurality of gestures  
3 on the touch pad as representing pad-to-screen mapping.

1                   43.     A method of remotely controlling a home entertainment device  
2 as in claim 29 further comprising recognizing at least one of a plurality of gestures  
3 on the touch pad as representing a pressure sensitive gesture.

1                   44.    A method of remotely controlling a home entertainment device  
2 as in claim 29 further comprising recognizing at least one of a plurality of gestures  
3 on the touch pad as representing a rotational control gesture.

1                   45.    A method of remotely controlling a home entertainment device  
2 as in claim 29 further comprising recognizing at least one of a plurality of gestures  
3 on the touch pad as representing a velocity control gesture.

1                   46.    A method of remotely controlling a home entertainment device  
2 as in claim 29 further comprising recognizing at least one of a plurality of gestures  
3 on the touch pad as representing an acceleration control gesture.

1                   47.    A method of remotely controlling a home entertainment device  
2 as in claim 29 further comprising recognizing at least one of a plurality of gestures  
3 on the touch pad as representing an alphanumeric character entry gesture..

1                   48.    A method of remotely controlling a home entertainment device  
2 as in claim 29 further comprising recognizing at least one of a plurality of gestures  
3 on the touch pad as representing a complex gesture, the complex gesture having at  
4 least two elements from a set consisting of straight line movements, taps, holds and  
5 circular movements.

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